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☐ 1. Document ID: US 20060078648 A1

L1: Entry 1 of 4 File: PGPB Apr 13, 2006

PGPUB-DOCUMENT-NUMBER: 20060078648
PGPUB-FILING-TYPE:
DOCUMENT-IDENTIFIER: US 20060078648 A1

TITLE: Method

PUBLICATION-DATE: April 13, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
De Kreij; Arno	Papendrecht		NL
Madrid; Susan Mampusti	Vedbaek		DK
Mikkelsen; Jorn Dalgaard	Hvidovre		DK
Soe; Jorn Borch	Tilst		DK

US-CL-CURRENT: 426/49; 435/52

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. Desc | Image

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☐ 2. Document ID: US 20060068462 A1

L1: Entry 2 of 4 File: PGPB Mar 30, 2006

PGPUB-DOCUMENT-NUMBER: 20060068462
PGPUB-FILING-TYPE:
DOCUMENT-IDENTIFIER: US 20060068462 A1

TITLE: Method

PUBLICATION-DATE: March 30, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
De Kreij; Arno	Papendrecht		NL
Madrid; Susan Mampust	Vedbaek		DK
Mikkelsen; Jorn Dalgaard	Hvidovre		DK
Soe; Jorn Borch	Tilst		DK

US-CL-CURRENT: 435/68.1; 435/105, 435/134, 435/135

WEST Search History

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DATE: Monday, June 12, 2006

Hide?	**Set Name**	**Query**	**Hit Count**
		DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ	
☐	L7	l6 and parapsilosis	1
☐	L6	L5 and l4	14
☐	L5	435/198.ccls.	839
☐	L4	435/193.ccls.	2461
☐	L3	lipase/acyltransferase same parapsilosis.ccls.	0
☐	L2	lipase/acyltransferase same parapsilosis	2
☐	L1	lipase/acyltransferase and dna	4

END OF SEARCH HISTORY

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=> s lipase/acyltransferase and parapsilosis
'ACYLTRANSFERASE' IS NOT A VALID FIELD CODE
'ACYLTRANSFERASE' IS NOT A VALID FIELD CODE
'ACYLTRANSFERASE' IS NOT A VALID FIELD CODE
'ACYLTRANSFERASE' IS NOT A VALID FIELD CODE
'ACYLTRANSFERASE' IS NOT A VALID FIELD CODE
'ACYLTRANSFERASE' IS NOT A VALID FIELD CODE
L1             0 LIPASE/ACYLTRANSFERASE AND PARAPSILOSIS

=> s lipase and acyltransferase and parapsilosis
L2            37 LIPASE AND ACYLTRANSFERASE AND PARAPSILOSIS

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3             13 DUP REM L2 (24 DUPLICATES REMOVED)

=> d l3 1-13 ibib ab

L3   ANSWER 1 OF 13  HCAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:         2006:77296  HCAPLUS
DOCUMENT NUMBER:          144:169671
TITLE:                    Lipid acyltransferase sequences for
                          enzymatic edible oil degumming
INVENTOR(S):              Soe, Jorn Borch; Turner, Mark
PATENT ASSIGNEE(S):       Danisco A/S, Den.
SOURCE:                   PCT Int. Appl., 165 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.          KIND    DATE          APPLICATION NO.        DATE
     ---------------     ----    --------      --------------------   --------
     WO 2006008508        A1     20060126      WO 2005-GB2823         20050718
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:                      GB 2004-16035       A  20040716
                                            US 2004-591185P     P  20040726
                                            GB 2005-13859       A  20050707
AB   A process of enzymic degumming edible oils, comprising treating the edible
     oil with a lipid acyltransferase so as to transfer an acyl group
     from a major part of the phospholipid to one or more acyl acceptors,
     wherein the acyl acceptor may be any compd. comprising a hydroxy group.
     In one embodiment preferably the acyl acceptor is water and in another
     embodiment preferably the acyl acceptor is one or more sterols and/or
     stanols.  When the acyl acceptor is a stanol and/or sterol, one or more
     sterol esters and/or stanol esters are produced.  The lipid
     acyltransferase for use in the process of the present invention
     may comprises one or more of the following amino acid sequences: SEQ ID
     No. 1, SEQ ID No. 3, SEQ ID No. 4, SEQ ID No. 5, SEQ ID No. 6, SEQ ID No.
     7, SEQ ID No. 8, SEQ ID No. 9, SEQ ID No. 10, SEQ ID No. 11, SEQ ID No.
     12, SEQ ID No. 13, SEQ ID No. 14, or SEQ ID No. 15, SEQ ID No. 16, SEQ ID
     No. 17, SEQ ID No. 18, SEQ ID No. 36, SEQ ID No. 38, SEQ ID No. 40, SEQ ID
     No. 41, SEQ ID No 45, SEQ ID No. 47, SEQ ID No. 50 or an amino acid
     sequence which has 75% or more identity thereto.  A novel lipid
     acyltransferase comprising the amino acid sequence shown as SEQ ID
     No. 16 is also taught.
REFERENCE COUNT:         8     THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3   ANSWER 2 OF 13  HCAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:        2005:158792  HCAPLUS
DOCUMENT NUMBER:         142:238727
TITLE:                   Use of oil-in-water emulsions prepared by the phase
                         inversion temperature method in enzymatic reactions
INVENTOR(S):             Weiss, Albrecht; Dubreucq, Eric; Mueller, Michael;
                         Moulin, Guy
PATENT ASSIGNEE(S):      Cognis Deutschland G.m.b.H. & Co. K.-G., Germany
SOURCE:                  PCT Int. Appl., 21 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                German
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE          APPLICATION NO.          DATE
     ---------------     ----   --------      --------------------     --------
     WO 2005017142        A1    20050224      WO 2004-EP8770           20040805
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
     DE 10337451          A1    20050317      DE 2003-10337451         20030814
     EP 1654357           A1    20060510      EP 2004-741371           20040805
          R: DE, ES, FR, GB, IT
PRIORITY APPLN. INFO.:                      DE 2003-10337451    A  20030814
                                            WO 2004-EP8770      W  20040805
OTHER SOURCE(S):         MARPAT 142:238727
```

AB The invention relates to the use of oil-in-water emulsions as a reaction medium for enzyme-catalyzed reactions. The invention is characterized in that the emulsion is prepd. by the phase inversion temp. (PIT) process and has a droplet size of 50 to 400 nm. The enzymes used are surface-active enzymes, esp. hydrolases or acyltransferases. Use of the system to transesterify Et oleate with methanol and isopropanol is demonstrated. An emulsion contg. Et oleate 1 g, Eumulgin B1 0.25 g and polyoxyethylated 6-cetyl alc. 0.2 g and water 3 g was prepd. by heating the mixt. to 95.degree. and cooling to below the phase inversion temp. (.apprx.66.degree.). The mixt. was then incubated with the CpLIP2 **lipase/acyltransferase** of Candida **parapsilosis** at 14 .mu.g/mL with methanol (0-4 mol/L) at 45.degree.. Transestericaton, as measured by methanolysis was maximal at 4 mol methanol/L with a rate of 0.128 .mu.mol/min/mL.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 13 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 2005481820 MEDLINE
DOCUMENT NUMBER: PubMed ID: 16049727
TITLE: A novel **lipase/acyltransferase** from the yeast Candida albicans: expression and characterisation of the recombinant enzyme.
AUTHOR: Roustan Jean Louis; Chu Agustin Rascon; Moulin Guy; Bigey Frederic
CORPORATE SOURCE: Unite Mixte de Recherche Ingenierie de la Reaction Biologique, Bioproductions, Institut National de la Recherche Agronomique-Ecole Nationale Superieure Agronomique de Montpellier, 34060 Montpellier cedex 1, France.
SOURCE: Applied microbiology and biotechnology, (2005 Aug) Vol. 68, No. 2, pp. 203-12. Electronic Publication: 2005-01-27. Journal code: 8406612. ISSN: 0175-7598.
PUB. COUNTRY: Germany: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200510
ENTRY DATE: Entered STN: 13 Sep 2005
Last Updated on STN: 21 Oct 2005
Entered Medline: 20 Oct 2005

AB A gene encoding an extracellular **lipase** (CaLIP4) from Candida albicans was successfully expressed in Saccharomyces cerevisiae after mutagenesis of its unusual CUG serine codon into a universal one. The ability of this **lipase**, which shares 60% sequence homology with the **lipase/acyltransferase** from Candida **parapsilosis**, to synthesise esters was investigated. CaLIP4 behaved as a true **lipase**, displaying activity towards insoluble triglycerides and having no activity in the presence of short-chain fatty acid (FA) esters and phosphatidylcholine. Methyl, ethyl and propyl esters were efficiently used. The **lipase** exhibited highest selectivity for unsaturated FA. With saturated FAs, C14-C16 acyl chains were preferred. In a biphasic aqueous/lipid system, CaLIP4 displayed a high alcoholysis activity with a range of alcohols (e.g. methanol, ethanol, propanol and isopropanol) as acyl acceptor. During the course of the alcoholysis reaction, new esters are produced at concentrations above the thermodynamic equilibrium of the esterification reaction, indicating that ester synthesis does not proceed by esterification but mainly by direct acyltransfer. Ester synthesis is under kinetic control due to the high rate of alcoholysis. Unwanted hydrolysis is limited by competition between the acyl acceptor (alcohol) and water for the acyltransfer reaction, favouring the alcohol.

L3 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:589153 HCAPLUS

DOCUMENT NUMBER: 141:119317
TITLE: Protein and cDNA sequences of Candida **parapsilosis lipase**/acyltransferases
INVENTOR(S): Weiss, Albrecht; Bigey, Frederic; Dubreucq, Eric; Moulin, Guy
PATENT ASSIGNEE(S): Germany
SOURCE: U.S. Pat. Appl. Publ., 21 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004142441	A1	20040722	US 2003-681636		20031008
CA 2403025	AA	20040408	CA 2002-2403025		20021015
PRIORITY APPLN. INFO.:			US 2002-416987P	P	20021008

AB Polypeptides with **lipase/acyltransferase** activity are described with an amino acid sequence which has identity to the sequence reported in SEQ ID NO 2 of at least 49%, also polypeptides which display this activity, as well as nucleic acids (genes) which code for these polypeptides, vectors which contain nucleic acids which code for these polypeptides, transformed microorganisms which contain these nucleic acids, processes for prodn. of these polypeptides and the application of nucleic acids for discovering new **lipase**/acyltransferases and the use of these **lipase**/acyltransferases as catalysts in chem. and biochem. processes.

L3 ANSWER 5 OF 13 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2004-16573 BIOTECHDS
TITLE: Novel isolated polypeptide with **lipase/ acyltransferase** activity useful as catalysts in chemical and biochemical reactions;
vector-mediated gene transfer and expression in bacterium, yeast or fungus for recombinant enzyme production
AUTHOR: DUBREUCQ E; MOULIN G; BIGEY F; WEISS A
PATENT ASSIGNEE: COGNIS DEUT GMBH and CO KG
PATENT INFO: CA 2403025 8 Apr 2004
APPLICATION INFO: CA 2002-2403025 15 Oct 2002
PRIORITY INFO: US 2002-416987 8 Oct 2002; US 2002-416987 8 Oct 2002
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2004-390791 [37]

AB DERWENT ABSTRACT:
NOVELTY - An isolated polypeptide (I) comprising a fully defined **lipase/acyltransferase** polypeptide sequence (S2) of 465 amino acids as given in specification, polypeptide (II) with **lipase/acyltransferase** activity with an amino acid sequence which is identical to (S2) in positions 190-390 to at least 96%; and polypeptide (III) with **lipase/acyltransferase** activity with an amino acid sequence which is identical to (S2), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1) a polypeptide (IV) with an amino acid sequence which possesses identity to a fully defined sequence (S4) of 471 amino acids as given in specification, of at least 49%, preferably 80%; (2) a polypeptide (V) with an amino acid sequence which is 100% identical to (S4); (3) a polypeptide fragments or polypeptides (VI) obtained by deletion mutation with **lipase/acyltransferase** activity, derived from (I)-(V);(4) a polypeptides (VII) obtainable by insertion mutation or chimeric polypeptides having **lipase/acyltransferase** activity which consist at least in a part of a polypeptide which is identical to (V) or (VI); (5) derivatives (VIII) of polypeptide with **lipase/acyltransferase** activity such as (I)-(VI) or (VII); (6) a polypeptide (IX) with **lipase/**

acyltransferase activity which have at least one antigenic determinant in common with (I)-(VII) or (VIII); (7) nucleic acids (X) which encode polypeptide with **lipase/acyltransferase** activity whose nucleotide sequences are identical to a fully defined sequence (S1) of 1398 nucleotides as given in specification, to 100%, especially over the partial region corresponding to amino acids 190-390 of (S2); (8) nucleic acids (XI) coding for an amino acid sequence which possesses identity to (S2) of at least 49%, preferably 80%; (9) nucleic acids (XII) coding for an amino acid sequence which is identical to (S2) in positions 190-390 to at least 96%; (10) nucleic acids (XIII) coding for (I)-(VII) or (IX); (11) nucleic acids (XIV) coding for a polypeptide with **lipase/acyltransferase** activity whose nucleotide sequence is identical to a fully defined sequence (S3) of 1416 nucleotides as given in specification; (12) nucleic acids (XV) coding for an amino acid sequence which possesses identity to (S4) of at least 49%, preferably 80%; (13) organism which forms (I)-(VIII) or (IX), or contains nucleic acids coding them; (14) vector (a cloning vector or expression vector) (XVI) containing the nucleic acids which codes for the above mentioned polypeptides or their derivatives; cell (XVII) containing the vector; (15) transformed host cell (XVIII) which expresses (I)-(VIII) or (IX)or can be stimulated to its expression, preferably using the expression vector; (16) producing (I)-(VIII) or (IX); and (17) use of a natural and/or recombinant microorganism containing a nucleic acid for the production of (I)-(VIII) or (IX).

BIOTECHNOLOGY - Preparation: (I) is prepared using (XI), the vector, the transformed host cell, or a cell derived from the above mentioned organism. (claimed). Preferred Polypeptide: (III) is present in glycosylated form, and is linked to another peptide, which is a marker, preferably a His-tag. (I)-(VIII), or (IX) is obtained from microorganism e.g., a eukaryotic fungus, preferably yeast fungus chosen from Candida **parapsilosis**, C.antarctica, (Trychosporon oryzae, Pseudozyma antarctica), C.glabrata, C.albicans, C.maltosa, C.tropicalis, C.viswanathii, Issatchenkia orientalis, (C.krusei, Kluyveromyces marxianus, (C.kefyr, C.pseudotropicalis), Pichia guilliermondii (C.guilliermondii), Geotrichum candidum, Fusarium solani and Aeromonas aerophila. Preferred Organism: The organism is a microorganism, preferably a yeast fungus. Preferred Cell: The transformed host cell contains a nucleic acid which encodes an amino acid sequence which possesses 100% identity to (S2) or (S4). Optionally, the cell contains a nucleic acid which encodes an amino acid sequence possessing 49% preferably 80% identity to (S4). The host cells are microorganisms chosen from C.**parapsilosis**, Saccharomyces cerevisiae, Schizosaccharomyces pombe, Pichia pastoris, P.boidinii, P.stipitis, Hansenula polymorpha, Kluyveromyces lactis, Schwanniomyces castellii, Yarrowia lipolytica, Escherichia coli, Bacillus subtilis, B.amyloliquefaciens, B.stearothermophilus, B.licheniformis, Lactococcus lactis, Streptococcus lactis, Lactobacillus bulgaricus, Aspergillus oryzae, A.niger, Trichoderma reesei, Mucor sp. and Rhizopus sp..

USE - (XI), the vector, transformed host cell, or a cell from the organism is useful for producing (I)-(VIII) or (IX). The nucleic acids as described above and/or amino acid sequences which have 49, preferably 80% identity to (S2) or (S4) are useful for discovering new acyltransferases. (I)-(VIII) or (IX) are useful as catalysts in acyltransfer reactions, especially the reactions which are chosen from alcoholysis of esters, alcoholysis of thioesters, thiolysis of esters, aminolysis of an ester with hydroxylamines or hydrazines, reaction of an ester with hydrogen peroxides and enantioselective synthesis of esters, thioesters and lactones by alcoholysis (all claimed).

EXAMPLE - No suitable example given. (46 pages)

L3 ANSWER 6 OF 13 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2004296150 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15196768
TITLE: High-level expression of Candida **parapsilosis** **lipase/acyltransferase** in Pichia

pastoris.
AUTHOR: Brunel Laetitia; Neugnot Virginie; Landucci Laure; Boze Helene; Moulin Guy; Bigey Frederic; Dubreucq Eric
CORPORATE SOURCE: UMR Ingenierie des reactions biologiques, bioproductions (IR2B), INRA--ENSA.M.--Universite Montpellier II, Equipe de Genie Microbiologique et Enzymatique, ENSA.M.--INRA, Place Viala, F-34060 Montpellier Cedex 1, France.
SOURCE: Journal of biotechnology, (2004 Jul 1) Vol. 111, No. 1, pp. 41-50.
Journal code: 8411927. ISSN: 0168-1656.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200502
ENTRY DATE: Entered STN: 16 Jun 2004
Last Updated on STN: 10 Feb 2005
Entered Medline: 9 Feb 2005

AB Candida **parapsilosis** has been previously shown to produce a **lipase/acyltransferase** (EC 3.1.1.3) that preferentially catalyses transfer reactions such as alcoholysis over hydrolysis in the presence of suitable nucleophiles other than water, even in aqueous media (aw > 0.9). This enzyme has been shown to belong to a new family of lipases. The present work describes the cloning of the gene coding for this **lipase/acyltransferase** in the yeast Pichia pastoris and the heterologous high-level expression of the recombinant enzyme. The **lipase/acyltransferase** gene, in which the sequence encoding the signal peptide was replaced by that of the alpha-factor of Saccharomyces cerevisiae, was placed under the control of the methanol inducible promoter of the alcohol oxidase 1 gene (AOX1). A transformed P. pastoris clone, containing five copies of the **lipase/acyltransferase** gene, was selected for the production of recombinant enzyme. The fed-batch culture supernatant contained 5.8 gl(-1) (weighted) of almost pure recombinant **lipase /acyltransferase** displaying the same catalytic behavior as the original enzyme.

L3 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:40196 HCAPLUS
DOCUMENT NUMBER: 138:102926
TITLE: Fungal **lipase**/acyltransferases, their production with recombinant cells, and their use in synthesis and reactions of esters
INVENTOR(S): Dubreucq, Eric; Bigey, Frederic; Moulin, Guy; Weiss, Albrecht
PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H. & Co. K.-G., Germany
SOURCE: Eur. Pat. Appl., 28 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

```
     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
     ---------------     ----   --------   --------------------   --------
     EP 1275711           A1    20030115   EP 2001-401855         20010711
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     WO 2003006644        A2    20030123   WO 2002-EP7413         20020704
     WO 2003006644        A3    20030918
         W:  BG, CN, CZ, HU, ID, JP, KR, PL, SI, SK, US
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
             LU, MC, NL, PT, SE, SK, TR
PRIORITY APPLN. INFO.:                     EP 2001-401855      A  20010711
```

AB The sequences of two **acyltransferase-lipase** enzymes of

Candida **parapsilosis** and the cDNAs encoding them are disclosed. The enzymes may be produced with recombinant microorganisms. These enzymes may be used for alcoholysis, thiolysis and aminolysis of esters as well as for enantioselective synthesis of esters, thioesters, and lactones. Thus, the cDNA for a C. **parapsilosis** **acyltransferase-lipase** was cloned and expressed in Pichia pastoris and Saccharomyces cerevisiae.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 13 MEDLINE on STN DUPLICATE 3
ACCESSION NUMBER: 2002164140 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11895444
TITLE: The **lipase/acyltransferase** from Candida **parapsilosis**: molecular cloning and characterization of purified recombinant enzymes.
AUTHOR: Neugnot Virginie; Moulin Guy; Dubreucq Eric; Bigey Frederic
CORPORATE SOURCE: Ecole Nationale Superieure Agronomique de Montpellier, Institut National de la Recherche Agronomique, UFR de Microbiologie Industrielle et de Genetique des Microorganismes, Montpellier, France.
SOURCE: European journal of biochemistry / FEBS, (2002 Mar) Vol. 269, No. 6, pp. 1734-45.
Journal code: 0107600. ISSN: 0014-2956.
PUB. COUNTRY: Germany: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AJ320260
ENTRY MONTH: 200205
ENTRY DATE: Entered STN: 17 Mar 2002
Last Updated on STN: 2 Jun 2002
Entered Medline: 31 May 2002

AB Candida **parapsilosis** has been previously shown to produce a **lipase** (i.e. able to catalyze efficiently the hydrolysis of insoluble lipid esters such as triacylglycerols) that preferentially catalyses transfer reactions such as alcoholysis in the presence of suitable nucleophiles other than water, even in aqueous media with high (> 0.9) water thermodynamic activity. The present work describes the cloning and the overexpression of the gene coding for this enzyme. Two ORFs (CpLIP1 and CpLIP2) were isolated. The deduced 465-amino-acid protein sequences contained the consensus motif (G-X-S-X-G) which is conserved among lipolytic enzymes. Only one of the two deduced proteins (CpLIP2) contained peptide sequences obtained from the purified **lipase/ acyltransferase**. Homology investigations showed that CpLIP2 has similarities principally with 11 lipases produced by C. albicans (42-61%) and the **lipase** A from Candida antarctica (31%) but not with the other lipases sequenced so far. Both CpLIP1 and CpLIP2 were expressed in Saccharomyces cerevisiae, but only CpLIP2 coded for an active protein. The substrate specificity and the catalytic behavior of purified recombinant CpLIP2, with or without a C-terminal histidine tag, were not changed compared to those of the native **lipase**.

L3 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:533875 HCAPLUS
DOCUMENT NUMBER: 129:229730
TITLE: Monohydroxamic acid biosynthesis
AUTHOR(S): Fournand, D.; Vaysse, L.; Dubreucq, E.; Arnaud, A.; Galzy, P.
CORPORATE SOURCE: UFR de Microbiologie Industrielle et Genetique des Microorganismes, Ecole Nationale Superieure Agronomique de Montpellier-Institut National de la Recherche Agronomique, Montpellier, 34060, Fr.
SOURCE: Journal of Molecular Catalysis B: Enzymatic (1998), 5(1-4), 207-211

CODEN: JMCEF8; ISSN: 1381-1177
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Hydroxamic acids (HA), with the general formula R-CO-NHOH, are chelating agents which may be used in a no. of interesting applications, such as medicine and waste water treatment. In this paper, we describe the enzymic synthesis of HA with various chain lengths (from C2 to C18), using three microbial enzymes. For short- and middle-chain HA synthesis, using amidases from Rhodococcus sp. R312, the optimal working pH was 7 or 8, depending on the amide substrate used. Different Michaelis-Menten consts. were also detd. For fatty HA synthesis, using **lipase** from Candida **parapsilosis**, the optimal working conditions were detd. to be pH 6, 1 M hydroxylamine and 40.degree.C. Because of the favorable bioconversion yields achieved, the enzymic synthesis of HA with the appropriate biocatalysts appears to be an interesting alternative to chem. synthesis.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 13 MEDLINE on STN DUPLICATE 4
ACCESSION NUMBER: 97308532 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9165758
TITLE: Fatty hydroxamic acid biosynthesis in aqueous medium in the presence of the **lipase-acyltransferase** from Candida **parapsilosis**.
AUTHOR: Vaysse L; Dubreucq E; Pirat J L; Galzy P
CORPORATE SOURCE: ENSA-INRA, UFR de Microbiologie Industrielle et de Genetique des Microorganismes, Montpellier, France.
SOURCE: Journal of biotechnology, (1997 Feb 28) Vol. 53, No. 1, pp. 41-6.
Journal code: 8411927. ISSN: 0168-1656.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Biotechnology
ENTRY MONTH: 199706
ENTRY DATE: Entered STN: 9 Jul 1997
Last Updated on STN: 9 Jul 1997
Entered Medline: 23 Jun 1997

AB The **lipase-acyltransferase** from Candida **parapsilosis** has been shown to catalyze fatty hydroxamic acid biosynthesis in a biphasic lipid/aqueous medium. The substrates of the reaction were an acyl donor (fatty acid or fatty acid methyl ester) and hydroxylamine. The transfer of acyl groups from a donor ester to hydroxylamine (aminolysis) was catalyzed preferentially to the reaction of free fatty acids. The highest synthesis activity was obtained in the presence of 1 M hydroxylamine at 45 degrees C and pH 6. This work confirmed the originality of the enzyme from Candida **parapsilosis**, which acts more like an **acyltransferase** than an hydrolase. This feature makes it an enzyme of choice for the direct bioconversion of oils in aqueous medium.

L3 ANSWER 11 OF 13 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
ACCESSION NUMBER: 1996-11923 BIOTECHDS
TITLE: Ester synthesis in aqueous media in the presence of various lipases;
methyl ester production in aqueous medium using 7 different **lipase** preparations
AUTHOR: Lecointe C; *Dubreucq E; Galzy P
CORPORATE SOURCE: INRA
LOCATION: UFR de Microbiologie Industrielle et de Genetique des Microorganismes ENSA-INRA, Place Viala, F-34060 Montpellier Cedex, France.
SOURCE: Biotechnol.Lett.; (1996) 18, 8, 869-74

CODEN: BILED3
ISSN: 0141-5492
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The ability of 7 **lipase** (EC-3.1.1.3) preparations to catalyze methyl ester production in aq. media was compared and the synthesis reaction (esterification or alcoholysis) was determined. The enzymes from Mucor miehei, Rhizopus delemar, Pseudomonas cepacia, Pseudomonas fluorescens, Rhizopus arrhizus, Candida deformans and the **lipase /acyltransferase** from Candida **parapsilosis** were examined. 3 Different behaviors were observed: the enzymes from M. miehei, R. delemar and C. deformans catalyzed ester synthesis by esterification of free fatty acids; the C. **parapsilosis** enzyme catalyzed alcoholysis; and the other 3 enzymes did not catalyze a net ester synthesis under the conditions tested. The 3 groups also differed in the influence of methanol on the hydrolysis reaction. The first group was not significantly inhibited up to the highest methanol concentration tested (5 M). C. **parapsilosis lipase/ acyltransferase** hydrolysis activity was increasingly inhibited by increasing methanol concentrations. For the third group, hydrolysis was 40-50% inhibited for all concentrations tested (0.2-5 M). (8 ref)

L3 ANSWER 12 OF 13 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1995:783242 SCISEARCH
THE GENUINE ARTICLE: TE361
TITLE: FACTORS AFFECTING THE ACYLTRANSFER ACTIVITY OF THE **LIPASE** FROM CANDIDA-**PARAPSILOSIS** IN AQUEOUS-MEDIA
AUTHOR: BRIAND D (Reprint); DUBREUCQ E; GALZY P
CORPORATE SOURCE: INRA, ENSAM, MICROBIOL IND & GENET MICROORGANISMES LAB, F-34060 MONTPELLIER 1, FRANCE
COUNTRY OF AUTHOR: FRANCE
SOURCE: JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, (NOV 1995) Vol. 72, No. 11, pp. 1367-1373.
ISSN: 0003-021X.
PUBLISHER: AMER OIL CHEMISTS SOC, 1608 BROADMOOR DRIVE, CHAMPAIGN, IL 61821-0489.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: AGRI
LANGUAGE: English
REFERENCE COUNT: 19
ENTRY DATE: Entered STN: 1995
Last Updated on STN: 1995
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB This study describes the influence of various factors on the hydrolysis and alcoholysis activities of the **lipase** from Candida **parapsilosis** (Ashford), Langeron and Talice in aqueous media. Optimal activities were obtained at 45 degrees C and pH 6-6.5. The influence of the nature of the substrate on the temperature activity profiles was observed. Total or partial recovery of the activities was obtained when methanol was added to the enzyme extract after thermal denaturation. A tyrosin residue appeared to be necessary for **lipase** function. Magnesium was a required metal cofactor. These activities were optimal in the presence of high amounts of water (water activity > 0.9).

L3 ANSWER 13 OF 13 MEDLINE on STN DUPLICATE 5
ACCESSION NUMBER: 96026997 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7475991
TITLE: Substrate specificity of the **lipase** from Candida **parapsilosis**.
AUTHOR: Briand D; Dubreucq E; Grimaud J; Galzy P
CORPORATE SOURCE: Ecole Nationale Superieure Agronomique, Institut National de la Recherche Agronomique, Montpellier, France.

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SOURCE:                 Lipids, (1995 Aug) Vol. 30, No. 8, pp. 747-54.
                        Journal code: 0060450. ISSN: 0024-4201.
PUB. COUNTRY:           United States
DOCUMENT TYPE:          Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:               English
FILE SEGMENT:           Priority Journals
ENTRY MONTH:            199512
ENTRY DATE:             Entered STN: 24 Jan 1996
                        Last Updated on STN: 3 Feb 1997
                        Entered Medline: 15 Dec 1995
AB    Substrate specificity of the acyltransferase activity of the
      lipase (EC 3.1.1.3) from Candida parapsilosis CBS 604
      was studied in aqueous media.  The specificity toward both acid and
      alcohol parts of a large number of acylglycerols and aliphatic esters was
      investigated.  This lipase showed a high activity in the
      presence of esters with long-chain fatty acids and particularly
      unsaturated fatty acids with a cis-delta 9 double bond.  It was observed
      that the activity profile depended not only on the alcohol part of the
      acyl ester, but also on the temperature of the reactant medium.  The best
      lipid substrates had their melting point between -40 to +20 degrees C, 14
      to 18 carbon atoms in the acyl group and 1 to 4 carbon atoms in the alkyl
      group.  The enzyme, defined as an acyltransferase in a previous
      paper, showed a high affinity for primary and secondary alcohols with a
      short carbon chain (1 to 5 carbon atoms) as acyl acceptors.  The influence
      of free alcohols in the reactant medium on the hydrolysis and alcoholysis
      activities of the enzyme is discussed.  Two phenomena seem to be involved,
      depending on the alcohol: competition with water for the acyltransfer
      reaction and lipid substrate dilution when the alcohol places at the
      oil/water interface.


=> d his

     (FILE 'HOME' ENTERED AT 13:50:36 ON 12 JUN 2006)

     FILE 'MEDLINE, HCAPLUS, BIOSIS, BIOTECHDS, EMBASE, SCISEARCH' ENTERED AT
     13:51:09 ON 12 JUN 2006
L1              0 S LIPASE/ACYLTRANSFERASE AND PARAPSILOSIS
L2             37 S LIPASE AND ACYLTRANSFERASE AND PARAPSILOSIS
L3             13 DUP REM L2 (24 DUPLICATES REMOVED)

=> log y
COST IN U.S. DOLLARS                             SINCE FILE     TOTAL
                                                      ENTRY   SESSION
FULL ESTIMATED COST                                   34.74     34.95

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)       SINCE FILE     TOTAL
                                                      ENTRY   SESSION
CA SUBSCRIBER PRICE                                   -3.75     -3.75

STN INTERNATIONAL LOGOFF AT 13:53:13 ON 12 JUN 2006
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=> file medline hcaplus biosis agricola embase
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

FILE 'MEDLINE' ENTERED AT 14:40:53 ON 12 JUN 2006

FILE 'HCAPLUS' ENTERED AT 14:40:53 ON 12 JUN 2006
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FILE 'AGRICOLA' ENTERED AT 14:40:53 ON 12 JUN 2006

FILE 'EMBASE' ENTERED AT 14:40:53 ON 12 JUN 2006
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=> s candida parapsilosis and lipase and acyltransferase
L1          28 CANDIDA PARAPSILOSIS AND LIPASE AND ACYLTRANSFERASE

=> dup rem l1
PROCESSING COMPLETED FOR L1
L2           10 DUP REM L1 (18 DUPLICATES REMOVED)

=> s l10 and (purified or purification)
L10 NOT FOUND
The L-number entered could not be found.  To see the definition
of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).

=> s l2 and (purified or purification)
L3           2 L2 AND (PURIFIED OR PURIFICATION)

=> dup rem l3
PROCESSING COMPLETED FOR L3
L4            2 DUP REM L3 (0 DUPLICATES REMOVED)

=> d l4 1-4 ibib ab

L4   ANSWER 1 OF 2     MEDLINE on STN
ACCESSION NUMBER:    2004296150     MEDLINE
DOCUMENT NUMBER:     PubMed ID: 15196768
TITLE:               High-level expression of Candida
                     parapsilosis lipase/
                     acyltransferase in Pichia pastoris.
AUTHOR:              Brunel Laetitia; Neugnot Virginie; Landucci Laure; Boze
                     Helene; Moulin Guy; Bigey Frederic; Dubreucq Eric
CORPORATE SOURCE:    UMR Ingenierie des reactions biologiques, bioproductions
                     (IR2B), INRA--ENSA.M.--Universite Montpellier II, Equipe de
                     Genie Microbiologique et Enzymatique, ENSA.M.--INRA, Place
                     Viala, F-34060 Montpellier Cedex 1, France.
SOURCE:              Journal of biotechnology, (2004 Jul 1) Vol. 111, No. 1, pp.
                     41-50.
                     Journal code: 8411927. ISSN: 0168-1656.
PUB. COUNTRY:        Netherlands
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
ENTRY MONTH:         200502
ENTRY DATE:          Entered STN: 16 Jun 2004
                     Last Updated on STN: 10 Feb 2005
                     Entered Medline: 9 Feb 2005
AB   Candida parapsilosis has been previously shown to
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         produce a lipase/acyltransferase (EC 3.1.1.3) that
         preferentially catalyses transfer reactions such as alcoholysis over
         hydrolysis in the presence of suitable nucleophiles other than water, even
         in aqueous media (aw > 0.9 ).  This enzyme has been shown to belong to a
         new family of lipases.  The present work describes the cloning of the gene
         coding for this lipase/acyltransferase in the yeast
         Pichia pastoris and the heterologous high-level expression of the
         recombinant enzyme.  The lipase/acyltransferase gene,
         in which the sequence encoding the signal peptide was replaced by that of
         the alpha-factor of Saccharomyces cerevisiae, was placed under the control
         of the methanol inducible promoter of the alcohol oxidase 1 gene (AOX1).
         A transformed P. pastoris clone, containing five copies of the
         lipase/acyltransferase gene, was selected for the
         production of recombinant enzyme.  The fed-batch culture supernatant
         contained 5.8 gl(-1) (weighted) of almost pure recombinant lipase
         /acyltransferase displaying the same catalytic behavior as the
         original enzyme.

L4   ANSWER 2 OF 2     MEDLINE on STN
ACCESSION NUMBER:    2002164140     MEDLINE
DOCUMENT NUMBER:     PubMed ID: 11895444
TITLE:               The lipase/acyltransferase from
                     Candida parapsilosis: molecular cloning
                     and characterization of purified recombinant
                     enzymes.
AUTHOR:              Neugnot Virginie; Moulin Guy; Dubreucq Eric; Bigey Frederic
CORPORATE SOURCE:    Ecole Nationale Superieure Agronomique de Montpellier,
                     Institut National de la Recherche Agronomique, UFR de
                     Microbiologie Industrielle et de Genetique des
                     Microorganismes, Montpellier, France.
SOURCE:              European journal of biochemistry / FEBS, (2002 Mar) Vol.
                     269, No. 6, pp. 1734-45.
                     Journal code: 0107600. ISSN: 0014-2956.
PUB. COUNTRY:        Germany: Germany, Federal Republic of
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
OTHER SOURCE:        GENBANK-AJ320260
ENTRY MONTH:         200205
ENTRY DATE:          Entered STN: 17 Mar 2002
                     Last Updated on STN: 2 Jun 2002
                     Entered Medline: 31 May 2002
AB       Candida parapsilosis has been previously shown to
         produce a lipase (i.e. able to catalyze efficiently the
         hydrolysis of insoluble lipid esters such as triacylglycerols) that
         preferentially catalyses transfer reactions such as alcoholysis in the
         presence of suitable nucleophiles other than water, even in aqueous media
         with high (> 0.9) water thermodynamic activity.  The present work
         describes the cloning and the overexpression of the gene coding for this
         enzyme.  Two ORFs (CpLIP1 and CpLIP2) were isolated.  The deduced
         465-amino-acid protein sequences contained the consensus motif (G-X-S-X-G)
         which is conserved among lipolytic enzymes.  Only one of the two deduced
         proteins (CpLIP2) contained peptide sequences obtained from the
         purified lipase/acyltransferase.  Homology
         investigations showed that CpLIP2 has similarities principally with 11
         lipases produced by C. albicans (42-61%) and the lipase A from
         Candida antarctica (31%) but not with the other lipases sequenced so far.
         Both CpLIP1 and CpLIP2 were expressed in Saccharomyces cerevisiae, but
         only CpLIP2 coded for an active protein.  The substrate specificity and
         the catalytic behavior of purified recombinant CpLIP2, with or
         without a C-terminal histidine tag, were not changed compared to those of
         the native lipase.

=> dup rem l2
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PROCESSING COMPLETED FOR L2
L5          10 DUP REM L2 (0 DUPLICATES REMOVED)

=> d l5 1-10 ibib ab

L5   ANSWER 1 OF 10  HCAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:         2006:77296  HCAPLUS
DOCUMENT NUMBER:          144:169671
TITLE:                    Lipid acyltransferase sequences for
                          enzymatic edible oil degumming
INVENTOR(S):              Soe, Jorn Borch; Turner, Mark
PATENT ASSIGNEE(S):       Danisco A/S, Den.
SOURCE:                   PCT Int. Appl., 165 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
     ---------------     ----   --------   --------------------   --------
     WO 2006008508        A1    20060126   WO 2005-GB2823         20050718
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:                     GB 2004-16035       A  20040716
                                           US 2004-591185P     P  20040726
                                           GB 2005-13859       A  20050707
AB   A process of enzymic degumming edible oils, comprising treating the edible
     oil with a lipid acyltransferase so as to transfer an acyl group
     from a major part of the phospholipid to one or more acyl acceptors,
     wherein the acyl acceptor may be any compd. comprising a hydroxy group.
     In one embodiment preferably the acyl acceptor is water and in another
     embodiment preferably the acyl acceptor is one or more sterols and/or
     stanols.  When the acyl acceptor is a stanol and/or sterol, one or more
     sterol esters and/or stanol esters are produced.  The lipid
     acyltransferase for use in the process of the present invention
     may comprises one or more of the following amino acid sequences: SEQ ID
     No. 1, SEQ ID No. 3, SEQ ID No. 4, SEQ ID No. 5, SEQ ID No. 6, SEQ ID No.
     7, SEQ ID No. 8, SEQ ID No. 9, SEQ ID No. 10, SEQ ID No. 11, SEQ ID No.
     12, SEQ ID No. 13, SEQ ID No. 14, or SEQ ID No. 15, SEQ ID No. 16, SEQ ID
     No. 17, SEQ ID No. 18, SEQ ID No. 36, SEQ ID No. 38, SEQ ID No. 40, SEQ ID
     No. 41, SEQ ID No 45, SEQ ID No. 47, SEQ ID No. 50 or an amino acid
     sequence which has 75% or more identity thereto.  A novel lipid
     acyltransferase comprising the amino acid sequence shown as SEQ ID
     No. 16 is also taught.
REFERENCE COUNT:          8     THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5   ANSWER 2 OF 10  HCAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:         2005:158792  HCAPLUS
DOCUMENT NUMBER:          142:238727
TITLE:                    Use of oil-in-water emulsions prepared by the phase
                          inversion temperature method in enzymatic reactions
INVENTOR(S):              Weiss, Albrecht; Dubreucq, Eric; Mueller, Michael;
                          Moulin, Guy
```

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PATENT ASSIGNEE(S):      Cognis Deutschland G.m.b.H. & Co. K.-G., Germany
SOURCE:                  PCT Int. Appl., 21 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                German
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE       APPLICATION NO.        DATE
     ---------------     ----   --------   --------------------   --------
     WO 2005017142        A1    20050224   WO 2004-EP8770         20040805
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
     DE 10337451          A1    20050317   DE 2003-10337451       20030814
     EP 1654357           A1    20060510   EP 2004-741371         20040805
         R:  DE, ES, FR, GB, IT
PRIORITY APPLN. INFO.:                     DE 2003-10337451    A  20030814
                                           WO 2004-EP8770      W  20040805
OTHER SOURCE(S):         MARPAT 142:238727
AB   The invention relates to the use of oil-in-water emulsions as a reaction
     medium for enzyme-catalyzed reactions.  The invention is characterized in
     that the emulsion is prepd. by the phase inversion temp. (PIT) process and
     has a droplet size of 50 to 400 nm.  The enzymes used are surface-active
     enzymes, esp. hydrolases or acyltransferases.  Use of the system to
     transesterify Et oleate with methanol and isopropanol is demonstrated.  An
     emulsion contg. Et oleate 1 g, Eumulgin B1 0.25 g and polyoxyethylated
     6-cetyl alc. 0.2 g and water 3 g was prepd. by heating the mixt. to
     95.degree. and cooling to below the phase inversion temp.
     (.apprx.66.degree.).  The mixt. was then incubated with the CpLIP2
     lipase/acyltransferase of Candida
     parapsilosis at 14 .mu.g/mL with methanol (0-4 mol/L) at
     45.degree..  Transesterication, as measured by methanolysis was maximal at
     4 mol methanol/L with a rate of 0.128 .mu.mol/min/mL.
REFERENCE COUNT:         3      THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5   ANSWER 3 OF 10     MEDLINE on STN
ACCESSION NUMBER:    2005481820     MEDLINE
DOCUMENT NUMBER:     PubMed ID: 16049727
TITLE:               A novel lipase/acyltransferase from the
                     yeast Candida albicans: expression and characterisation of
                     the recombinant enzyme.
AUTHOR:              Roustan Jean Louis; Chu Agustin Rascon; Moulin Guy; Bigey
                     Frederic
CORPORATE SOURCE:    Unite Mixte de Recherche Ingenierie de la Reaction
                     Biologique, Bioproductions, Institut National de la
                     Recherche Agronomique-Ecole Nationale Superieure
                     Agronomique de Montpellier, 34060 Montpellier cedex 1,
                     France.
SOURCE:              Applied microbiology and biotechnology, (2005 Aug) Vol. 68,
                     No. 2, pp. 203-12.  Electronic Publication: 2005-01-27.
                     Journal code: 8406612. ISSN: 0175-7598.
PUB. COUNTRY:        Germany: Germany, Federal Republic of
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
```

ENTRY MONTH: 200510
ENTRY DATE: Entered STN: 13 Sep 2005
Last Updated on STN: 21 Oct 2005
Entered Medline: 20 Oct 2005

AB A gene encoding an extracellular **lipase** (CaLIP4) from Candida albicans was successfully expressed in Saccharomyces cerevisiae after mutagenesis of its unusual CUG serine codon into a universal one. The ability of this **lipase**, which shares 60% sequence homology with the **lipase/acyltransferase** from **Candida parapsilosis**, to synthesise esters was investigated. CaLIP4 behaved as a true **lipase**, displaying activity towards insoluble triglycerides and having no activity in the presence of short-chain fatty acid (FA) esters and phosphatidylcholine. Methyl, ethyl and propyl esters were efficiently used. The **lipase** exhibited highest selectivity for unsaturated FA. With saturated FAs, C14-C16 acyl chains were preferred. In a biphasic aqueous/lipid system, CaLIP4 displayed a high alcoholysis activity with a range of alcohols (e.g. methanol, ethanol, propanol and isopropanol) as acyl acceptor. During the course of the alcoholysis reaction, new esters are produced at concentrations above the thermodynamic equilibrium of the esterification reaction, indicating that ester synthesis does not proceed by esterification but mainly by direct acyltransfer. Ester synthesis is under kinetic control due to the high rate of alcoholysis. Unwanted hydrolysis is limited by competition between the acyl acceptor (alcohol) and water for the acyltransfer reaction, favouring the alcohol.

L5 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:589153 HCAPLUS
DOCUMENT NUMBER: 141:119317
TITLE: Protein and cDNA sequences of **Candida parapsilosis lipase**/acyltransferases
INVENTOR(S): Weiss, Albrecht; Bigey, Frederic; Dubreucq, Eric; Moulin, Guy
PATENT ASSIGNEE(S): Germany
SOURCE: U.S. Pat. Appl. Publ., 21 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004142441	A1	20040722	US 2003-681636		20031008
CA 2403025	AA	20040408	CA 2002-2403025		20021015
PRIORITY APPLN. INFO.:			US 2002-416987P	P	20021008

AB Polypeptides with **lipase/acyltransferase** activity are described with an amino acid sequence which has identity to the sequence reported in SEQ ID NO 2 of at least 49%, also polypeptides which display this activity, as well as nucleic acids (genes) which code for these polypeptides, vectors which contain nucleic acids which code for these polypeptides, transformed microorganisms which contain these nucleic acids, processes for prodn. of these polypeptides and the application of nucleic acids for discovering new **lipase**/acyltransferases and the use of these **lipase**/acyltransferases as catalysts in chem. and biochem. processes.

L5 ANSWER 5 OF 10 MEDLINE on STN
ACCESSION NUMBER: 2004296150 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15196768
TITLE: High-level expression of **Candida parapsilosis lipase/ acyltransferase** in Pichia pastoris.
AUTHOR: Brunel Laetitia; Neugnot Virginie; Landucci Laure; Boze Helene; Moulin Guy; Bigey Frederic; Dubreucq Eric

CORPORATE SOURCE: UMR Ingenierie des reactions biologiques, bioproductions (IR2B), INRA--ENSA.M.--Universite Montpellier II, Equipe de Genie Microbiologique et Enzymatique, ENSA.M.--INRA, Place Viala, F-34060 Montpellier Cedex 1, France.
SOURCE: Journal of biotechnology, (2004 Jul 1) Vol. 111, No. 1, pp. 41-50.
Journal code: 8411927. ISSN: 0168-1656.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200502
ENTRY DATE: Entered STN: 16 Jun 2004
Last Updated on STN: 10 Feb 2005
Entered Medline: 9 Feb 2005

AB **Candida parapsilosis** has been previously shown to produce a **lipase/acyltransferase** (EC 3.1.1.3) that preferentially catalyses transfer reactions such as alcoholysis over hydrolysis in the presence of suitable nucleophiles other than water, even in aqueous media (aw > 0.9). This enzyme has been shown to belong to a new family of lipases. The present work describes the cloning of the gene coding for this **lipase/acyltransferase** in the yeast Pichia pastoris and the heterologous high-level expression of the recombinant enzyme. The **lipase/acyltransferase** gene, in which the sequence encoding the signal peptide was replaced by that of the alpha-factor of Saccharomyces cerevisiae, was placed under the control of the methanol inducible promoter of the alcohol oxidase 1 gene (AOX1). A transformed P. pastoris clone, containing five copies of the **lipase/acyltransferase** gene, was selected for the production of recombinant enzyme. The fed-batch culture supernatant contained 5.8 gl(-1) (weighted) of almost pure recombinant **lipase /acyltransferase** displaying the same catalytic behavior as the original enzyme.

L5 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:40196 HCAPLUS
DOCUMENT NUMBER: 138:102926
TITLE: Fungal **lipase**/acyltransferases, their production with recombinant cells, and their use in synthesis and reactions of esters
INVENTOR(S): Dubreucq, Eric; Bigey, Frederic; Moulin, Guy; Weiss, Albrecht
PATENT ASSIGNEE(S): Cognis Deutschland G.m.b.H. & Co. K.-G., Germany
SOURCE: Eur. Pat. Appl., 28 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1275711	A1	20030115	EP 2001-401855	20010711
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
WO 2003006644	A2	20030123	WO 2002-EP7413	20020704
WO 2003006644	A3	20030918		
W: BG, CN, CZ, HU, ID, JP, KR, PL, SI, SK, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				

PRIORITY APPLN. INFO.: EP 2001-401855 A 20010711

AB The sequences of two **acyltransferase-lipase** enzymes of **Candida parapsilosis** and the cDNAs encoding them are disclosed. The enzymes may be produced with recombinant microorganisms. These enzymes may be used for alcoholysis, thiolysis and aminolysis of esters as well as for enantioselective synthesis of esters, thioesters, and lactones. Thus, the cDNA for a C. parapsilosis **acyltransferase-lipase** was cloned and expressed in Pichia pastoris and Saccharomyces cerevisiae.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 10 MEDLINE on STN
ACCESSION NUMBER: 2002164140 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11895444
TITLE: The **lipase/acyltransferase** from **Candida parapsilosis**: molecular cloning and characterization of purified recombinant enzymes.
AUTHOR: Neugnot Virginie; Moulin Guy; Dubreucq Eric; Bigey Frederic
CORPORATE SOURCE: Ecole Nationale Superieure Agronomique de Montpellier, Institut National de la Recherche Agronomique, UFR de Microbiologie Industrielle et de Genetique des Microorganismes, Montpellier, France.
SOURCE: European journal of biochemistry / FEBS, (2002 Mar) Vol. 269, No. 6, pp. 1734-45.
Journal code: 0107600. ISSN: 0014-2956.
PUB. COUNTRY: Germany: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AJ320260
ENTRY MONTH: 200205
ENTRY DATE: Entered STN: 17 Mar 2002
Last Updated on STN: 2 Jun 2002
Entered Medline: 31 May 2002

AB **Candida parapsilosis** has been previously shown to produce a **lipase** (i.e. able to catalyze efficiently the hydrolysis of insoluble lipid esters such as triacylglycerols) that preferentially catalyses transfer reactions such as alcoholysis in the presence of suitable nucleophiles other than water, even in aqueous media with high (> 0.9) water thermodynamic activity. The present work describes the cloning and the overexpression of the gene coding for this enzyme. Two ORFs (CpLIP1 and CpLIP2) were isolated. The deduced 465-amino-acid protein sequences contained the consensus motif (G-X-S-X-G) which is conserved among lipolytic enzymes. Only one of the two deduced proteins (CpLIP2) contained peptide sequences obtained from the purified **lipase/acyltransferase**. Homology investigations showed that CpLIP2 has similarities principally with 11 lipases produced by C. albicans (42-61%) and the **lipase** A from Candida antarctica (31%) but not with the other lipases sequenced so far. Both CpLIP1 and CpLIP2 were expressed in Saccharomyces cerevisiae, but only CpLIP2 coded for an active protein. The substrate specificity and the catalytic behavior of purified recombinant CpLIP2, with or without a C-terminal histidine tag, were not changed compared to those of the native **lipase**.

L5 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:533875 HCAPLUS
DOCUMENT NUMBER: 129:229730
TITLE: Monohydroxamic acid biosynthesis
AUTHOR(S): Fournand, D.; Vaysse, L.; Dubreucq, E.; Arnaud, A.; Galzy, P.
CORPORATE SOURCE: UFR de Microbiologie Industrielle et Genetique des Microorganismes, Ecole Nationale Superieure Agronomique de Montpellier-Institut National de la Recherche Agronomique, Montpellier, 34060, Fr.
SOURCE: Journal of Molecular Catalysis B: Enzymatic (1998), 5(1-4), 207-211
CODEN: JMCEF8; ISSN: 1381-1177
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Hydroxamic acids (HA), with the general formula R-CO-NHOH, are chelating agents which may be used in a no. of interesting applications, such as medicine and waste water treatment. In this paper, we describe the enzymic synthesis of HA with various chain lengths (from C2 to C18), using three microbial enzymes. For short- and middle-chain HA synthesis, using amidases from Rhodococcus sp. R312, the optimal working pH was 7 or 8, depending on the amide substrate used. Different Michaelis-Menten consts. were also detd. For fatty HA synthesis, using **lipase** from **Candida parapsilosis**, the optimal working conditions were detd. to be pH 6, 1 M hydroxylamine and 40.degree.C. Because of the favorable bioconversion yields achieved, the enzymic synthesis of HA with the appropriate biocatalysts appears to be an interesting alternative to chem. synthesis.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 10 MEDLINE on STN
ACCESSION NUMBER: 97308532 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9165758
TITLE: Fatty hydroxamic acid biosynthesis in aqueous medium in the presence of the **lipase-acyltransferase** from **Candida parapsilosis**.
AUTHOR: Vaysse L; Dubreucq E; Pirat J L; Galzy P
CORPORATE SOURCE: ENSA-INRA, UFR de Microbiologie Industrielle et de Genetique des Microorganismes, Montpellier, France.
SOURCE: Journal of biotechnology, (1997 Feb 28) Vol. 53, No. 1, pp. 41-6.
Journal code: 8411927. ISSN: 0168-1656.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Biotechnology
ENTRY MONTH: 199706
ENTRY DATE: Entered STN: 9 Jul 1997
Last Updated on STN: 9 Jul 1997
Entered Medline: 23 Jun 1997

AB The **lipase-acyltransferase** from **Candida parapsilosis** has been shown to catalyze fatty hydroxamic acid biosynthesis in a biphasic lipid/aqueous medium. The substrates of the reaction were an acyl donor (fatty acid or fatty acid methyl ester) and hydroxylamine. The transfer of acyl groups from a donor ester to hydroxylamine (aminolysis) was catalyzed preferentially to the reaction of free fatty acids. The highest synthesis activity was obtained in the presence of 1 M hydroxylamine at 45 degrees C and pH 6. This work confirmed the originality of the enzyme from **Candida parapsilosis**, which acts more like an **acyltransferase** than an hydrolase. This feature makes it an enzyme of choice for the direct bioconversion of oils in aqueous medium.

L5 ANSWER 10 OF 10 MEDLINE on STN
ACCESSION NUMBER: 96026997 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7475991
TITLE: Substrate specificity of the **lipase** from **Candida parapsilosis**.
AUTHOR: Briand D; Dubreucq E; Grimaud J; Galzy P
CORPORATE SOURCE: Ecole Nationale Superieure Agronomique, Institut National de la Recherche Agronomique, Montpellier, France.
SOURCE: Lipids, (1995 Aug) Vol. 30, No. 8, pp. 747-54.
Journal code: 0060450. ISSN: 0024-4201.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199512

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ENTRY DATE:          Entered STN: 24 Jan 1996
                     Last Updated on STN: 3 Feb 1997
                     Entered Medline: 15 Dec 1995
AB    Substrate specificity of the acyltransferase activity of the
      lipase (EC 3.1.1.3) from Candida parapsilosis
      CBS 604 was studied in aqueous media.  The specificity toward both acid
      and alcohol parts of a large number of acylglycerols and aliphatic esters
      was investigated.  This lipase showed a high activity in the
      presence of esters with long-chain fatty acids and particularly
      unsaturated fatty acids with a cis-delta 9 double bond.  It was observed
      that the activity profile depended not only on the alcohol part of the
      acyl ester, but also on the temperature of the reactant medium.  The best
      lipid substrates had their melting point between -40 to +20 degrees C, 14
      to 18 carbon atoms in the acyl group and 1 to 4 carbon atoms in the alkyl
      group.  The enzyme, defined as an acyltransferase in a previous
      paper, showed a high affinity for primary and secondary alcohols with a
      short carbon chain (1 to 5 carbon atoms) as acyl acceptors.  The influence
      of free alcohols in the reactant medium on the hydrolysis and alcoholysis
      activities of the enzyme is discussed.  Two phenomena seem to be involved,
      depending on the alcohol: competition with water for the acyltransfer
      reaction and lipid substrate dilution when the alcohol places at the
      oil/water interface.


=> d his

      (FILE 'HOME' ENTERED AT 14:40:17 ON 12 JUN 2006)

      FILE 'MEDLINE, HCAPLUS, BIOSIS, AGRICOLA, EMBASE' ENTERED AT 14:40:53 ON
      12 JUN 2006
L1            28 S CANDIDA PARAPSILOSIS AND LIPASE AND ACYLTRANSFERASE
L2            10 DUP REM L1 (18 DUPLICATES REMOVED)
L3             2 S L2 AND (PURIFIED OR PURIFICATION)
L4             2 DUP REM L3 (0 DUPLICATES REMOVED)
L5            10 DUP REM L2 (0 DUPLICATES REMOVED)

=> log y
COST IN U.S. DOLLARS                              SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    24.10      24.31

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)        SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -3.75      -3.75

STN INTERNATIONAL LOGOFF AT 14:45:19 ON 12 JUN 2006
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=> file medline hcaplus biosis biotechds embase
COST IN U.S. DOLLARS                              SINCE FILE     TOTAL
                                                       ENTRY   SESSION
FULL ESTIMATED COST                                     0.21      0.21

FILE 'MEDLINE' ENTERED AT 15:34:49 ON 12 JUN 2006

FILE 'HCAPLUS' ENTERED AT 15:34:49 ON 12 JUN 2006
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FILE 'BIOTECHDS' ENTERED AT 15:34:49 ON 12 JUN 2006
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FILE 'EMBASE' ENTERED AT 15:34:49 ON 12 JUN 2006
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=> file medline hcaplus embase
COST IN U.S. DOLLARS                              SINCE FILE     TOTAL
                                                       ENTRY   SESSION
FULL ESTIMATED COST                                     6.74      6.95

FILE 'MEDLINE' ENTERED AT 15:35:35 ON 12 JUN 2006

FILE 'HCAPLUS' ENTERED AT 15:35:35 ON 12 JUN 2006
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FILE 'EMBASE' ENTERED AT 15:35:35 ON 12 JUN 2006
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=> s lipase purification and candida parapsilosis
L1             0 LIPASE PURIFICATION AND CANDIDA PARAPSILOSIS

=> s lipase and candida parapsilosis
L2            45 LIPASE AND CANDIDA PARAPSILOSIS

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3             29 DUP REM L2 (16 DUPLICATES REMOVED)

=> s l3 and acyltransferase?
L4            10 L3 AND ACYLTRANSFERASE?

=> s l4 (purified or isolated or purification)
MISSING OPERATOR 'L16 (PURIFIED'
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s l4 and (purified or isolated or purification)
L5             2 L4 AND (PURIFIED OR ISOLATED OR PURIFICATION)

=> d l5 1-2

L5   ANSWER 1 OF 2     MEDLINE on STN
AN   2004296150     MEDLINE
DN   PubMed ID: 15196768
TI   High-level expression of Candida parapsilosis
     lipase/acyltransferase in Pichia pastoris.
AU   Brunel Laetitia; Neugnot Virginie; Landucci Laure; Boze Helene; Moulin
```

```
        Guy; Bigey Frederic; Dubreucq Eric
CS      UMR Ingenierie des reactions biologiques, bioproductions (IR2B),
        INRA--ENSA.M.--Universite Montpellier II, Equipe de Genie Microbiologique
        et Enzymatique, ENSA.M.--INRA, Place Viala, F-34060 Montpellier Cedex 1,
        France.
SO      Journal of biotechnology, (2004 Jul 1) Vol. 111, No. 1, pp. 41-50.
        Journal code: 8411927. ISSN: 0168-1656.
CY      Netherlands
DT      Journal; Article; (JOURNAL ARTICLE)
LA      English
FS      Priority Journals
EM      200502
ED      Entered STN: 16 Jun 2004
        Last Updated on STN: 10 Feb 2005
        Entered Medline: 9 Feb 2005

L5      ANSWER 2 OF 2     MEDLINE on STN
AN      2002164140     MEDLINE
DN      PubMed ID: 11895444
TI      The lipase/acyltransferase from Candida
        parapsilosis: molecular cloning and characterization of
        purified recombinant enzymes.
AU      Neugnot Virginie; Moulin Guy; Dubreucq Eric; Bigey Frederic
CS      Ecole Nationale Superieure Agronomique de Montpellier, Institut National
        de la Recherche Agronomique, UFR de Microbiologie Industrielle et de
        Genetique des Microorganismes, Montpellier, France.
SO      European journal of biochemistry / FEBS, (2002 Mar) Vol. 269, No. 6, pp.
        1734-45.
        Journal code: 0107600. ISSN: 0014-2956.
CY      Germany: Germany, Federal Republic of
DT      Journal; Article; (JOURNAL ARTICLE)
LA      English
FS      Priority Journals
OS      GENBANK-AJ320260
EM      200205
ED      Entered STN: 17 Mar 2002
        Last Updated on STN: 2 Jun 2002
        Entered Medline: 31 May 2002


=> d l3 1-29

L3      ANSWER 1 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN      2006:192303  HCAPLUS
DN      144:252788
TI      Enantioselective biotransformation for preparation of protein tyrosine
        kinase inhibitor intermediates
IN      Kung, Pei-Pei; Martinez, Carlos Alberto; Tao, Junhua
PA      Pfizer Inc., USA
SO      PCT Int. Appl., 53 pp.
        CODEN: PIXXD2
DT      Patent
LA      English
FAN.CNT 1
        PATENT NO.          KIND    DATE        APPLICATION NO.         DATE
        ---------------     ----    --------    -------------------     --------
PI      WO 2006021885       A1      20060302    WO 2005-IB2839          20050815
            W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
                CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
                GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
                LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
                NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
                SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
                ZA, ZM, ZW
            RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
     US 2006046287        A1    20060302    US 2005-213025         20050826
PRAI US 2004-605118P      P     20040826
OS   MARPAT 144:252788
RE.CNT  6      THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3   ANSWER 2 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN   2006:77296  HCAPLUS
DN   144:169671
TI   Lipid acyltransferase sequences for enzymatic edible oil degumming
IN   Soe, Jorn Borch; Turner, Mark
PA   Danisco A/S, Den.
SO   PCT Int. Appl., 165 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 2
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2006008508        A1    20060126    WO 2005-GB2823         20050718
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,
             NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRAI GB 2004-16035        A     20040716
     US 2004-591185P      P     20040726
     GB 2005-13859        A     20050707
RE.CNT  8      THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3   ANSWER 3 OF 29  EMBASE  COPYRIGHT (c) 2006 Elsevier B.V. All rights
     reserved on STN
AN   2006203839  EMBASE
TI   Comparison of proteinase, lipase and alpha-glucosidase
     activities from the clinical isolates of Candida species.
AU   Bramono K.; Yamazaki M.; Tsuboi R.; Ogawa H.
CS   R. Tsuboi, Department of Dermatology, Tokyo Medical University, 6-7-1
     Nishishinjuku, Shinjuku-ku, Tokyo 160-0023, Japan. tsuboi@tokyo-med.ac.jp
SO   Japanese Journal of Infectious Diseases, (2006) Vol. 59, No. 2, pp. 73-76.
     .
     Refs: 23
     ISSN: 1344-6304  E-ISSN: 1344-6304  CODEN: JJIDFE
CY   Japan
DT   Journal; Article
FS   004     Microbiology
LA   English
SL   English
ED   Entered STN: 25 May 2006
     Last Updated on STN: 25 May 2006

L3   ANSWER 4 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:158792  HCAPLUS
DN   142:238727
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TI   Use of oil-in-water emulsions prepared by the phase inversion temperature
     method in enzymatic reactions
IN   Weiss, Albrecht; Dubreucq, Eric; Mueller, Michael; Moulin, Guy
PA   Cognis Deutschland G.m.b.H. & Co. K.-G., Germany
SO   PCT Int. Appl., 21 pp.
     CODEN: PIXXD2
DT   Patent
LA   German
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2005017142        A1    20050224    WO 2004-EP8770         20040805
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
     DE 10337451          A1    20050317    DE 2003-10337451       20030814
     EP 1654357           A1    20060510    EP 2004-741371         20040805
         R:  DE, ES, FR, GB, IT
PRAI DE 2003-10337451     A     20030814
     WO 2004-EP8770       W     20040805
OS   MARPAT 142:238727
RE.CNT  3      THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3   ANSWER 5 OF 29  EMBASE  COPYRIGHT (c) 2006 Elsevier B.V. All rights
     reserved on STN
AN   2005300141  EMBASE
TI   An extracellular lipase from the dimorphic yeast Arxula
     adeninivorans: Molecular cloning of the ALIP1 gene and characterization of
     the purified recombinant enzyme.
AU   Boer E.; Mock H.P.; Bode R.; Gellissen G.; Kunze G.
CS   G. Kunze, Institut fur Pflanzengenetik und Kulturpflanzenforschung,
     Corrensstrasse 3, D-06466 Gatersleben, Germany. kunzeg@ipk-gatersleben.de
SO   Yeast, (2005) Vol. 22, No. 7, pp. 523-535. .
     Refs: 50
     ISSN: 0749-503X  CODEN: YESTE3
CY   United Kingdom
DT   Journal; Article
FS   004     Microbiology
LA   English
SL   English
ED   Entered STN: 21 Jul 2005
     Last Updated on STN: 21 Jul 2005

L3   ANSWER 6 OF 29    MEDLINE on STN                    DUPLICATE 1
AN   2005481820    MEDLINE
DN   PubMed ID: 16049727
TI   A novel lipase/acyltransferase from the yeast Candida albicans:
     expression and characterisation of the recombinant enzyme.
AU   Roustan Jean Louis; Chu Agustin Rascon; Moulin Guy; Bigey Frederic
CS   Unite Mixte de Recherche Ingenierie de la Reaction Biologique,
     Bioproductions, Institut National de la Recherche Agronomique-Ecole
     Nationale Superieure Agronomique de Montpellier, 34060 Montpellier cedex
     1, France.
SO   Applied microbiology and biotechnology, (2005 Aug) Vol. 68, No. 2, pp.
     203-12.  Electronic Publication: 2005-01-27.
     Journal code: 8406612. ISSN: 0175-7598.
```

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CY   Germany: Germany, Federal Republic of
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   Priority Journals
EM   200510
ED   Entered STN: 13 Sep 2005
     Last Updated on STN: 21 Oct 2005
     Entered Medline: 20 Oct 2005

L3   ANSWER 7 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:589153  HCAPLUS
DN   141:119317
TI   Protein and cDNA sequences of Candida parapsilosis
     lipase/acyltransferases
IN   Weiss, Albrecht; Bigey, Frederic; Dubreucq, Eric; Moulin, Guy
PA   Germany
SO   U.S. Pat. Appl. Publ., 21 pp.
     CODEN: USXXCO
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   US 2004142441        A1    20040722    US 2003-681636         20031008
     CA 2403025           AA    20040408    CA 2002-2403025        20021015
PRAI US 2002-416987P      P     20021008

L3   ANSWER 8 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:1068231  HCAPLUS
DN   142:155534
TI   Asymmetric reduction of alkyl 2-oxo-4-arylbutanoates and -but-3-enoates by
     Candida parapsilosis ATCC 7330: assignment of the
     absolute configuration of ethyl 2-hydroxy-4-(p-methylphenyl)but-3-enoate
     by 1H NMR
AU   Baskar, Baburaj; Pandian, N. Ganesh; Priya, Kuttikode; Chadha, Anju
CS   Laboratory of Bioorganic Chemistry, Department of Biotechnology, Indian
     Institute of Technology Madras, Chennai, 600 036, India
SO   Tetrahedron: Asymmetry (2004), 15(24), 3961-3966
     CODEN: TASYE3; ISSN: 0957-4166
PB   Elsevier B.V.
DT   Journal
LA   English
OS   CASREACT 142:155534
RE.CNT  37     THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3   ANSWER 9 OF 29     MEDLINE on STN                    DUPLICATE 2
AN   2004296150     MEDLINE
DN   PubMed ID: 15196768
TI   High-level expression of Candida parapsilosis
     lipase/acyltransferase in Pichia pastoris.
AU   Brunel Laetitia; Neugnot Virginie; Landucci Laure; Boze Helene; Moulin
     Guy; Bigey Frederic; Dubreucq Eric
CS   UMR Ingenierie des reactions biologiques, bioproductions (IR2B),
     INRA--ENSA.M.--Universite Montpellier II, Equipe de Genie Microbiologique
     et Enzymatique, ENSA.M.--INRA, Place Viala, F-34060 Montpellier Cedex 1,
     France.
SO   Journal of biotechnology, (2004 Jul 1) Vol. 111, No. 1, pp. 41-50.
     Journal code: 8411927. ISSN: 0168-1656.
CY   Netherlands
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   Priority Journals
EM   200502
ED   Entered STN: 16 Jun 2004
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          Last Updated on STN: 10 Feb 2005
          Entered Medline: 9 Feb 2005

L3    ANSWER 10 OF 29  EMBASE  COPYRIGHT (c) 2006 Elsevier B.V. All rights
      reserved on STN
AN    2004240193  EMBASE
TI    [The estimation of the activity of hydrolitic egzoenzymes and of
      susceptibility of the yeast-like fungi to antifungal agents in patients
      with CTCL and bullous treated with immunosuppressive therapeutics].
      OCENA AKTYWNOSCI ENZYMATCZNEJ I LEKOWRAZLIWOSCI ROZNYCH SZCZEPOW
      DROZDZAKOW IZOLOWANYCH OD PACJENTOW Z PIERWOTNYMI CHlONIAKAMI SKORY I
      CHOROBAMI PECHERZOWYMI LECZONYCH LEKAMI IMMUNOSUPRESYJNYMI.
AU    Plomer-Niezgoda E.; Hryncewicz-Gwozdz A.; Maj J.; Baran E.; Walow B.
CS    E. Plomer-Niezgoda, Klin. Dermatol., Wenerol. i Alergol., AM, ul.
      Chalubinskiego 1, 50-386 Wroclaw, Poland
SO    Mikologia Lekarska, (2004) Vol. 11, No. 1, pp. 35-41. .
      Refs: 17
      ISSN: 1232-986X  CODEN: MILEFO
CY    Poland
DT    Journal; Article
FS    004     Microbiology
      026     Immunology, Serology and Transplantation
      027     Biophysics, Bioengineering and Medical Instrumentation
      037     Drug Literature Index
LA    Polish
SL    English; Polish
ED    Entered STN: 28 Jun 2004
      Last Updated on STN: 28 Jun 2004

L3    ANSWER 11 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN    2003:40196  HCAPLUS
DN    138:102926
TI    Fungal lipase/acyltransferases, their production with
      recombinant cells, and their use in synthesis and reactions of esters
IN    Dubreucq, Eric; Bigey, Frederic; Moulin, Guy; Weiss, Albrecht
PA    Cognis Deutschland G.m.b.H. & Co. K.-G., Germany
SO    Eur. Pat. Appl., 28 pp.
      CODEN: EPXXDW
DT    Patent
LA    German
FAN.CNT 1
      PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
      ---------------     ----   --------    --------------------   --------
PI    EP 1275711           A1    20030115    EP 2001-401855         20010711
          R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
      WO 2003006644        A2    20030123    WO 2002-EP7413         20020704
      WO 2003006644        A3    20030918
          W:  BG, CN, CZ, HU, ID, JP, KR, PL, SI, SK, US
          RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
              LU, MC, NL, PT, SE, SK, TR
PRAI EP 2001-401855        A     20010711
RE.CNT  6       THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
                ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3    ANSWER 12 OF 29  EMBASE  COPYRIGHT (c) 2006 Elsevier B.V. All rights
      reserved on STN
AN    2003270916  EMBASE
TI    Microbial lipases as virulence factors.
AU    Stehr F.; Kretschmar M.; Kroger C.; Hube B.; Schafer W.
CS    F. Stehr, Institut fur Allgemeine Botanik, AMP III, Universitat Hamburg,
      Ohnhorststrasse 18, 22609 Hamburg, Germany. stehr@lipases.de
SO    Journal of Molecular Catalysis B: Enzymatic, (11 Jul 2003) Vol. 22, No.
      5-6, pp. 347-355. .
      Refs: 42
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     ISSN: 1381-1177  CODEN: JMCEF8
CY   Netherlands
DT   Journal; General Review
FS   004     Microbiology
     005     General Pathology and Pathological Anatomy
     013     Dermatology and Venereology
LA   English
SL   English
ED   Entered STN: 17 Jul 2003
     Last Updated on STN: 17 Jul 2003

L3   ANSWER 13 OF 29     MEDLINE on STN                DUPLICATE 3
AN   2002164140     MEDLINE
DN   PubMed ID: 11895444
TI   The lipase/acyltransferase from Candida
     parapsilosis: molecular cloning and characterization of purified
     recombinant enzymes.
AU   Neugnot Virginie; Moulin Guy; Dubreucq Eric; Bigey Frederic
CS   Ecole Nationale Superieure Agronomique de Montpellier, Institut National
     de la Recherche Agronomique, UFR de Microbiologie Industrielle et de
     Genetique des Microorganismes, Montpellier, France.
SO   European journal of biochemistry / FEBS, (2002 Mar) Vol. 269, No. 6, pp.
     1734-45.
     Journal code: 0107600. ISSN: 0014-2956.
CY   Germany: Germany, Federal Republic of
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   Priority Journals
OS   GENBANK-AJ320260
EM   200205
ED   Entered STN: 17 Mar 2002
     Last Updated on STN: 2 Jun 2002
     Entered Medline: 31 May 2002

L3   ANSWER 14 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN   2001:224089  HCAPLUS
DN   135:106547
TI   A comparison of the chemical, microbiological and sensory characteristics
     of bovine and ovine Halloumi cheese
AU   Papademas, Photis; Robinson, Richard K.
CS   Department of Food Science and Technology, The University of Reading,
     Reading, RG6 6AP, UK
SO   International Dairy Journal (2001), Volume Date 2000, 10(11), 761-768
     CODEN: IDAJE6; ISSN: 0958-6946
PB   Elsevier Science Ltd.
DT   Journal
LA   English
RE.CNT  49     THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3   ANSWER 15 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN   2001:653448  HCAPLUS
DN   136:293786
TI   Some probiotic properties of yeast isolates from infant feces and Feta
     cheese
AU   Psomas, E.; Andrighetto, C.; Litopoulou-Tzanetaki, E.; Lombardi, A.;
     Tzanetakis, N.
CS   Faculty of Agriculture, Laboratory of Food Microbiology and Hygiene,
     Aristotle University of Thessaloniki, Thessaloniki, 54006, Greece
SO   International Journal of Food Microbiology (2001), 69(1-2), 125-133
     CODEN: IJFMDD; ISSN: 0168-1605
PB   Elsevier Science Ltd.
DT   Journal
LA   English
RE.CNT  31     THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
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                ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3    ANSWER 16 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN    2002:127618  HCAPLUS
DN    136:229199
TI    Lipase activity of yeasts and yeast-like fungi functioning under
      natural conditions
AU    Paskevicius, A.
CS    Institute of Botany, Vilnius, LT-2021, Lithuania
SO    Biologija (2001), (4), 16-18
      CODEN: BOLOE8; ISSN: 1392-0146
PB    Lietuvos Mokslu Akademijos Leidykla
DT    Journal
LA    English
RE.CNT  10     THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
                ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3    ANSWER 17 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN    2000:604713  HCAPLUS
DN    133:334251
TI    Characterisation of yeast flora isolated from an artisanal Portuguese
      ewes' cheese
AU    Pereira-Dias, S.; Potes, M. E.; Marinho, A.; Malfeito-Ferreira, M.;
      Loureiro, V.
CS    Tapada da Ajuda, Departamento de Botanica e Engenharia Biologica,
      Laboratorio de Microbiologia, Instituto Superior de Agronomia, Lisbon,
      1349-017, Port.
SO    International Journal of Food Microbiology (2000), 60(1), 55-63
      CODEN: IJFMDD; ISSN: 0168-1605
PB    Elsevier Science Ltd.
DT    Journal
LA    English
RE.CNT  31     THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
                ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3    ANSWER 18 OF 29  EMBASE  COPYRIGHT (c) 2006 Elsevier B.V. All rights
      reserved on STN
AN    1998224951  EMBASE
TI    An autopsy case of subcutaneous nodular fat necrosis associated with
      chronic pancreatitis.
AU    Seki T.; Nakayama D.; Furukawa M.; Matsubayashi H.; Yamada M.; Kokuno S.;
      Mizumura Y.; Magami Y.; Horibe T.; Niito T.; Kaneda S.; Sudou I.; Saitoh
      T.
CS    Y. Mizumura, Fourth Dept. of Internal Medicine, Tokyo Medical College,
      Tokyo, Japan
SO    Japanese Journal of Gastroenterology, (1998) Vol. 95, No. 6, pp. 578-583.
      .
      Refs: 10
      ISSN: 0446-6586  CODEN: NIPAA4
CY    Japan
DT    Journal; Article
FS    005     General Pathology and Pathological Anatomy
      006     Internal Medicine
      037     Drug Literature Index
      048     Gastroenterology
LA    Japanese
ED    Entered STN: 27 Jul 1998
      Last Updated on STN: 27 Jul 1998

L3    ANSWER 19 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN DUPLICATE 4
AN    1998:533875  HCAPLUS
DN    129:229730
TI    Monohydroxamic acid biosynthesis
AU    Fournand, D.; Vaysse, L.; Dubreucq, E.; Arnaud, A.; Galzy, P.
CS    UFR de Microbiologie Industrielle et Genetique des Microorganismes, Ecole
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         Nationale Superieure Agronomique de Montpellier-Institut National de la
         Recherche Agronomique, Montpellier, 34060, Fr.
SO       Journal of Molecular Catalysis B: Enzymatic (1998), 5(1-4), 207-211
         CODEN: JMCEF8; ISSN: 1381-1177
PB       Elsevier Science B.V.
DT       Journal
LA       English
RE.CNT  6      THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3       ANSWER 20 OF 29     MEDLINE on STN                  DUPLICATE 5
AN       97195779      MEDLINE
DN       PubMed ID: 9043110
TI       Cloning and characterization of a gene (LIP1) which encodes a
         lipase from the pathogenic yeast Candida albicans.
AU       Fu Y; Ibrahim A S; Fonzi W; Zhou X; Ramos C F; Ghannoum M A
CS       St John's Cardiovascular Research Center, Department of Medicine,
         Harbour-UCLA Medical Center, Torrance 90509, USA.
NC       1RO1AI35097 (NIAID)
SO       Microbiology (Reading, England), (1997 Feb) Vol. 143 ( Pt 2), pp. 331-40.
         Journal code: 9430468. ISSN: 1350-0872.
CY       ENGLAND: United Kingdom
DT       Journal; Article; (JOURNAL ARTICLE)
LA       English
FS       Priority Journals
OS       GENBANK-U34807
EM       199703
ED       Entered STN: 14 Apr 1997
         Last Updated on STN: 14 Apr 1997
         Entered Medline: 31 Mar 1997

L3       ANSWER 21 OF 29     MEDLINE on STN                  DUPLICATE 6
AN       97308532      MEDLINE
DN       PubMed ID: 9165758
TI       Fatty hydroxamic acid biosynthesis in aqueous medium in the presence of
         the lipase-acyltransferase from Candida
         parapsilosis.
AU       Vaysse L; Dubreucq E; Pirat J L; Galzy P
CS       ENSA-INRA, UFR de Microbiologie Industrielle et de Genetique des
         Microorganismes, Montpellier, France.
SO       Journal of biotechnology, (1997 Feb 28) Vol. 53, No. 1, pp. 41-6.
         Journal code: 8411927. ISSN: 0168-1656.
CY       Netherlands
DT       Journal; Article; (JOURNAL ARTICLE)
LA       English
FS       Biotechnology
EM       199706
ED       Entered STN: 9 Jul 1997
         Last Updated on STN: 9 Jul 1997
         Entered Medline: 23 Jun 1997

L3       ANSWER 22 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN       1996:455140  HCAPLUS
DN       125:108543
TI       Induction of an extracellular esterase from Candida albicans and some of
         its properties
AU       Tsuboi, Ryoji; Komatsuzaki, Hisano; Ogawa, Hideoki
CS       Dep. Dermatol., Juntendo Univ. Sch. Med., Tokyo, 113, Japan
SO       Infection and Immunity (1996), 64(8), 2936-2940
         CODEN: INFIBR; ISSN: 0019-9567
PB       American Society for Microbiology
DT       Journal
LA       English

L3       ANSWER 23 OF 29  HCAPLUS  COPYRIGHT 2006 ACS on STN
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RESULT 3
CPA320260/c
LOCUS       CPA320260               4642 bp    DNA     linear   PLN 27-AUG-2002
DEFINITION  Candida parapsilosis lip1 gene for lipase 1 and lip2 gene for
            lipase 2.
ACCESSION   AJ320260
VERSION     AJ320260.1  GI:21953340
KEYWORDS    acyl transferase; LIP1 gene; LIP2 gene; lipase 1; lipase 2.
SOURCE      Candida parapsilosis
  ORGANISM  Candida parapsilosis
            Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
            Saccharomycetales; mitosporic Saccharomycetales; Candida.
REFERENCE   1
  AUTHORS   Neugnot,V., Moulin,G., Dubreucq,E. and Bigey,F.
  TITLE     The lipase/acyltransferase from Candida parapsilosis: molecular
            cloning and characterization of purified recombinant enzymes
  JOURNAL   Eur. J. Biochem. 269 (6), 1734-1745 (2002)
   PUBMED   11895444
REFERENCE   2  (bases 1 to 4642)
  AUTHORS   Bigey,F.
  TITLE     Direct Submission
  JOURNAL   Submitted (20-JUL-2001) Bigey F., Laboratoire M.I.G.M.,
            E.N.S.A.M.-I.N.R.A., 2, place Viala, F-34060 Montpellier Cedex 1,
            FRANCE
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     CDS             complement(2629. .4026)
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                     /EC_number="3.1.1.3"
                     /function="secreted lipase/acyltransferase"
                     /experiment="experimental evidence, no additional details
                     recorded"
                     /codon_start=1
                     /transl_table=12
                     /product="lipase 2"
                     /protein_id="CAC86400.1"
                     /db_xref="GI:21953342"
                     /db_xref="GOA:Q8NIN8"
                     /db_xref="UniProtKB/TrEMBL:Q8NIN8"
                     /translation="MRYFAIAFLLINTISAFVLAPKKPSQDDFYTPPQGYEAQPLGSI
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                     GLQSGRATLNSLRATLKSGNLTGVSSDAETLLWGYSGGSLASGWAAAIQKEYAPELSK
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     mat_peptide     complement(2632. .3978)
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                     /product="lipase 2"
                     /EC_number="3.1.1.3"
                     /experiment="experimental evidence, no additional details
                     recorded"
ORIGIN

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  Best Local Similarity  100.0%;  Pred. No. 1.2e-297;
  Matches 1398;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGCGTTACTTTGCTATTGCTTTCTTGCTCATCAATACCATTTCAGCTTTTGTCTTGGCT 60
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Db       4026 ATGCGTTACTTTGCTATTGCTTTCTTGCTCATCAATACCATTTCAGCTTTTGTCTTGGCT 3967

Qy         61 CCCAAAAAGCCATCTCAAGACGATTTCTACACTCCACCACAAGGTTATGAAGCTCAACCT 120
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Qy        121 CTTGGTTCTATTTTGAAAACAAGAAACGTCCCCAATCCATTGACTAATGTTTTCACTCCA 180
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Qy        181 GTTAAAGTTCAAAATGCATGGCAATTATTGGTTAGATCTGAAGATACATTTGGTAACCCA 240
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Db       3846 GTTAAAGTTCAAAATGCATGGCAATTATTGGTTAGATCTGAAGATACATTTGGTAACCCA 3787

Qy        241 AACGCCATAGTCACTACCATTATTCAACCTTTCAATGCTAAAAAGGATAAGCTTGTTTCT 300
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Db       3786 AACGCCATAGTCACTACCATTATTCAACCTTTCAATGCTAAAAAGGATAAGCTTGTTTCT 3727

Qy        301 TATCAAACATTTGAAGATTCTGGTAAATTGGATTGTGCTCCATCATATGCTATTCAATAT 360
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Qy        361 GGATCGGACATTTCGACTTTGACCACTCAAGGTGAAATGTACTACATCTCTGCTTTATTA 420
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Db        3666 GGATCGGACATTTCGACTTTGACCACTCAAGGTGAAATGTACTACATCTCTGCTTTATTA 3607

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Qy         541 TTGACTGGTGTTTCATCAGACGCTGAGACATTATTGTGGGGTTATTCAGGAGGAAGTCTT 600
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy         601 GCTTCAGGATGGGCTGCTGCTATACAAAAAGAATATGCTCCAGAGTTGAGTAAAAACTTG 660
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Db        3426 GCTTCAGGATGGGCTGCTGCTATACAAAAAGAATATGCTCCAGAGTTGAGTAAAAACTTG 3367

Qy         661 CTTGGTGCTGCACTTGGTGGATTCGTTACAAACATTACTGCCACTGCTGAAGCTGTTGAT 720
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Qy         721 AGTGGTCCATTTGCAGGAATCATCTCCAATGCATTGGCTGGTATTGGAAATGAATACCCT 780
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Db        3306 AGTGGTCCATTTGCAGGAATCATCTCCAATGCATTGGCTGGTATTGGAAATGAATACCCT 3247

Qy         781 GATTTCAAAAACTATCTTTTGAAAAAAGTGTCACCATTGCTTTCAATCACTTATCGTTTG 840
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Qy         841 GGAAACACTCACTGTTTGCTTGATGGTGGTATTGCTTATTTCGGTAAATCATTCTTTTCC 900
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Db        3186 GGAAACACTCACTGTTTGCTTGATGGTGGTATTGCTTATTTCGGTAAATCATTCTTTTCC 3127

Qy         901 AGAATTATTAGATATTTCCCTGATGGATGGGATCTTGTCAACCAAGAACCTATCAAAACC 960
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Db        3126 AGAATTATTAGATATTTCCCTGATGGATGGGATCTTGTCAACCAAGAACCTATCAAAACC 3067

Qy         961 ATCTTGCAAGATAATGGATTGGTTTACCAACCAAAGGACTTGACCCCACAAATTCCATTA 1020
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Db        3066 ATCTTGCAAGATAATGGATTGGTTTACCAACCAAAGGACTTGACCCCACAAATTCCATTA 3007

Qy        1021 TTCATCTACCACGGTACCTTGGATGCAATTGTCCCCATTGTCAACTCAAGAAAGACATTC 1080
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        3006 TTCATCTACCACGGTACCTTGGATGCAATTGTCCCCATTGTCAACTCAAGAAAGACATTC 2947

Qy        1081 CAACAATGGTGTGATTGGGGACTCAAATCTGGTGAATATAATGAAGATTTGACCAATGGA 1140
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Qy        1141 CACATTACTGAATCAATTGTGGGTGCACCAGCTGCTTTGACTTGGATTATCAATCGTTTC 1200
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Db        2886 CACATTACTGAATCAATTGTGGGTGCACCAGCTGCTTTGACTTGGATTATCAATCGTTTC 2827

Qy        1201 AATGGACAGCCTCCAGTTGATGGATGTCAACATAATGTGAGAGCTTCAAACTTGGAATAT 1260
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Db        2766 CCAGGAACTCCACAATCAATCAAGAATTACTTTGAAGCTGCATTGCACGCAATTTTGGGC 2707

Qy        1321 TTTGATTTGGGTCCAGATGTTAAGAGAGATAAGGTTACTTTGGGCGGATTGCTCAAGTTG 1380
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        2706 TTTGATTTGGGTCCAGATGTTAAGAGAGATAAGGTTACTTTGGGCGGATTGCTCAAGTTG 2647

Qy        1381 GAACGTTTTGCTTTTTAG 1398
               ||||||||||||||||||
Db        2646 GAACGTTTTGCTTTTTAG 2629
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